

# MODULAR FILTERPAC



## *Media Air Cleaner*



**TRION**<sup>®</sup>  
air purification systems

# MODULAR FILTERPAC



## ENGINEERED SOLUTIONS FOR CLEAN AIR

There are certain things you expect from an air purification system.

Virtually a perfect fit for your specific application... effectiveness... availability... simplicity of operation. Back all these features up with substantial product and application expertise, superb technical services, and unconditional support anywhere, anytime, and you've got the first name in purification systems: Trion.

Since 1947, Trion has been effectively cleaning indoor air for clients as demanding as the United States Navy nuclear submarine fleet and providing quality products that serve a broad range of applications in the commercial and industrial markets. With Trion's solutions, you have the industry's most advanced and specialized air cleaning systems to eliminate your toughest air purification problems.

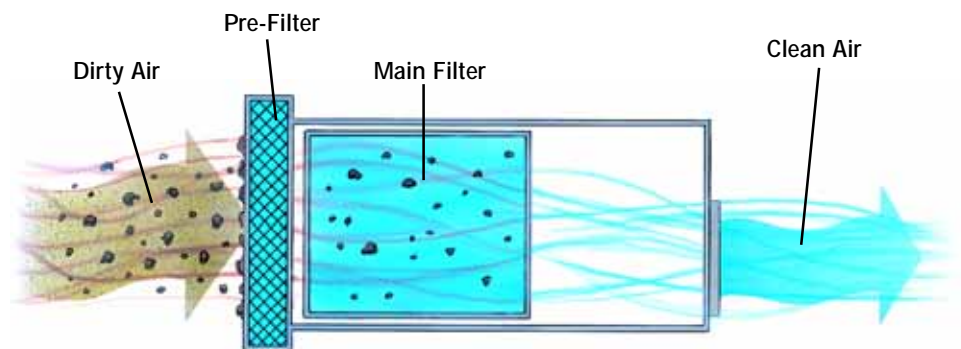
Designed with versatility in mind, the Modular FilterPac can be used anywhere for high efficiency filtration.



## How It Works

Media air cleaners draw pollutants from the air through a first stage pre-filter to capture large particulate. This extends the life of the primary media filter, which uses a combination of technologies

including: straining, impaction, interception, and diffusion to strip submicron particles from the air. Adsorption after-filters may also be incorporated to eliminate or reduce odors.



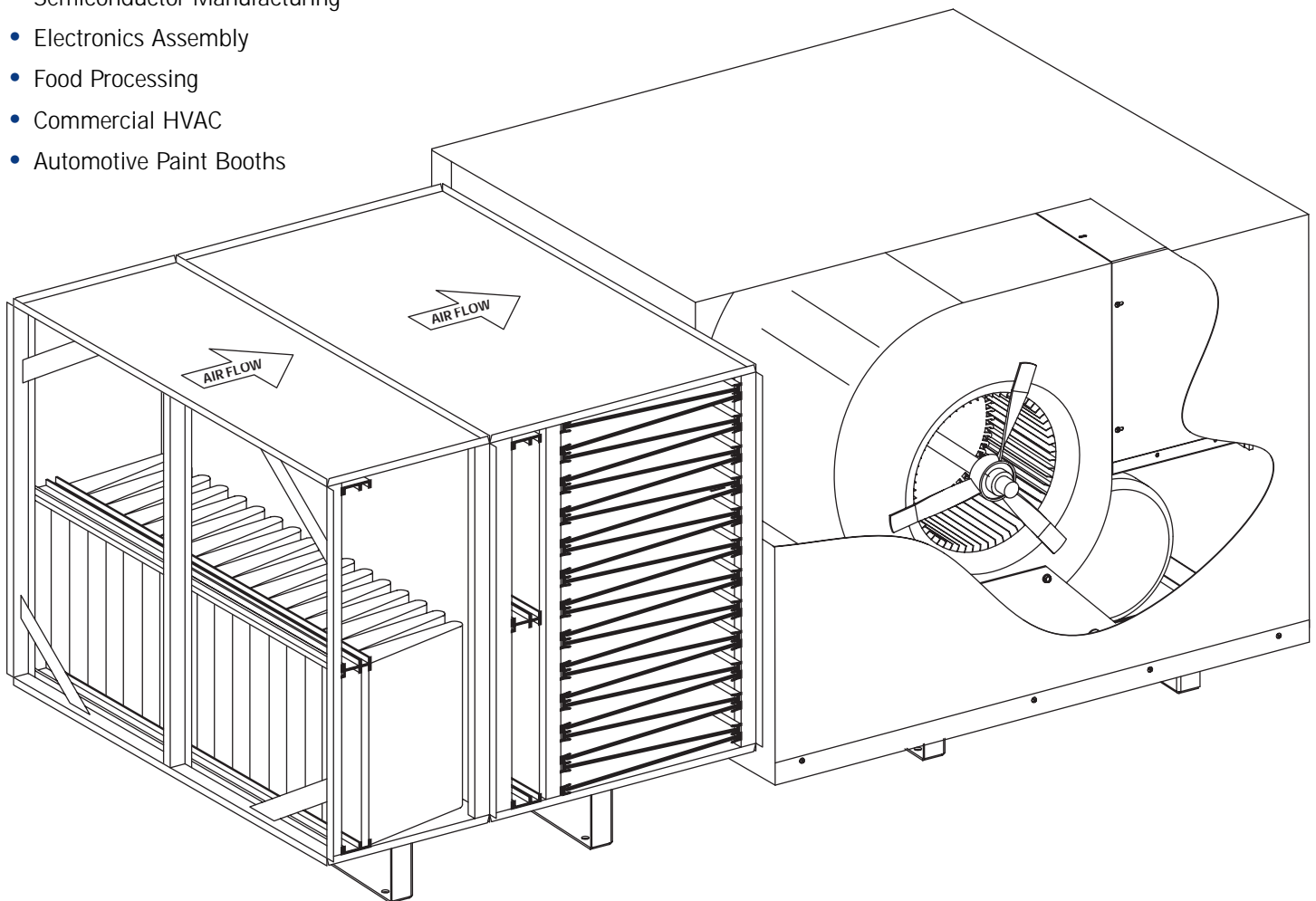
**MEDIA AIR CLEANING**

# Media Air Cleaner

## CONFIGURES TO YOUR APPLICATION

The Modular FilterPac offers one of the widest, most efficient media filter options in the market. The building-block design allows for versatility in a wide variety of industrial manufacturing operations and design configurations to provide varying degrees of filtration efficiencies in applications such as:

- Healthcare Facilities
- Semiconductor Manufacturing
- Electronics Assembly
- Food Processing
- Commercial HVAC
- Automotive Paint Booths



## FEATURES

- Modular cabinets
- Hinged side access door
- Numerous filter options
- Hot dipped galvanized finish
- Unitary mounting rails

## BENEFITS

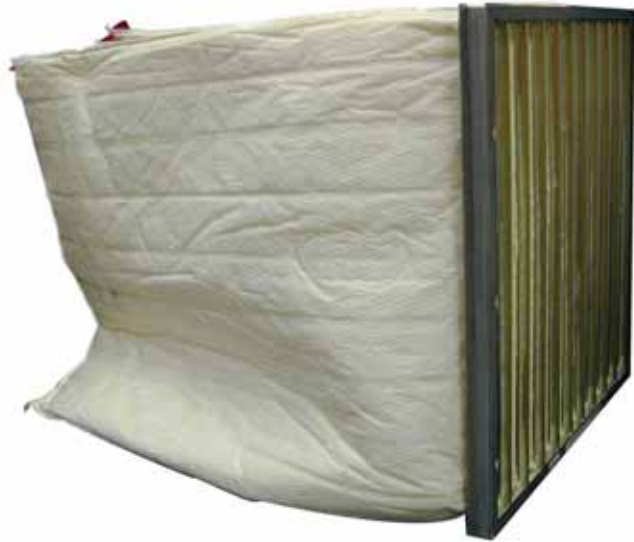
- Flexible system design
- Quick, easy access to filters
- Tailored to suit your application
- Zinc coating for a more durable finish than painted steel
- Eliminates field assembly of modules, facilitates installation
- Fits most common filter requirements

# FILTER OPTIONS



## BAG FILTER

Bag filters are generally deep in the direction of air flow, which helps reduce pressure drop and handle higher loading over a wide range of efficiencies. Bag media may consist of micro fiberglass, polyester or other synthetic fibers. In Trion products, bags are successfully used in multi-stage filtration to prolong main filter life, which in turn reduces maintenance costs.



## HEPA FILTER

High Efficiency Particulate Air (HEPA) filters are 99.97% efficient in removing particles 0.3 micron and larger. HEPA filters utilize spun-hooked glass fiber rolled into a paper-like material. This material is pleated to increase the fiber surface area and bonded (or potted) into a frame. Hot melt is used to hold the pleats far enough apart to allow air to flow between them.

The life of a HEPA filter depends on the ambient conditions and maintenance of the pre-filters. Since airflow capacity decreases and static pressure increases over time, HEPA filters actually become more efficient as the filter loads.



## PLEATED MEDIA

Pleated (extended surface) filters provide more surface area than conventional filters due to the fore and aft pattern of the pleat. An increase in surface area results in increased contaminant holding capacity and service life while reducing energy costs.

A variety of media compositions, efficiencies and operating temperature ranges are available. Both natural and synthetic materials are used in the make-up of the media: cellulose materials, fiberglass and blends of cotton and polyester.

Depending on the air cleaner and the application, the pleated filter may be the primary filter or the second stage of a multi-stage unit.



## ADSORBER FILTERS

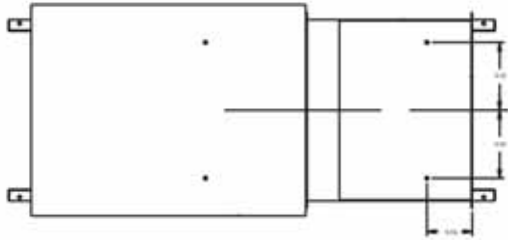
Unlike particulate filters, odors in the form of undesirable gases and vapors are most commonly removed from the air stream by the process of adsorption that is enhanced by multi-faceted porous surfaces of certain materials. Filter trays in a vee-bank configuration of activated carbon or optional potassium permanganate pellets effectively facilitate the adsorption of these odor and gas contaminants.



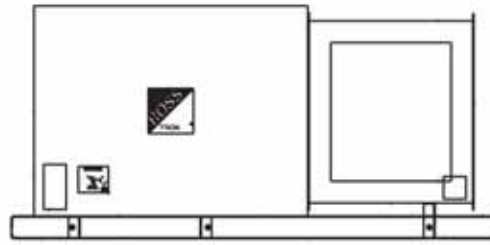
# DIMENSIONAL DATA



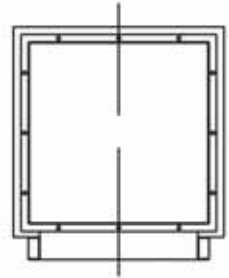
**TOP VIEW**



**SIDE VIEW**



**INLET VIEW**

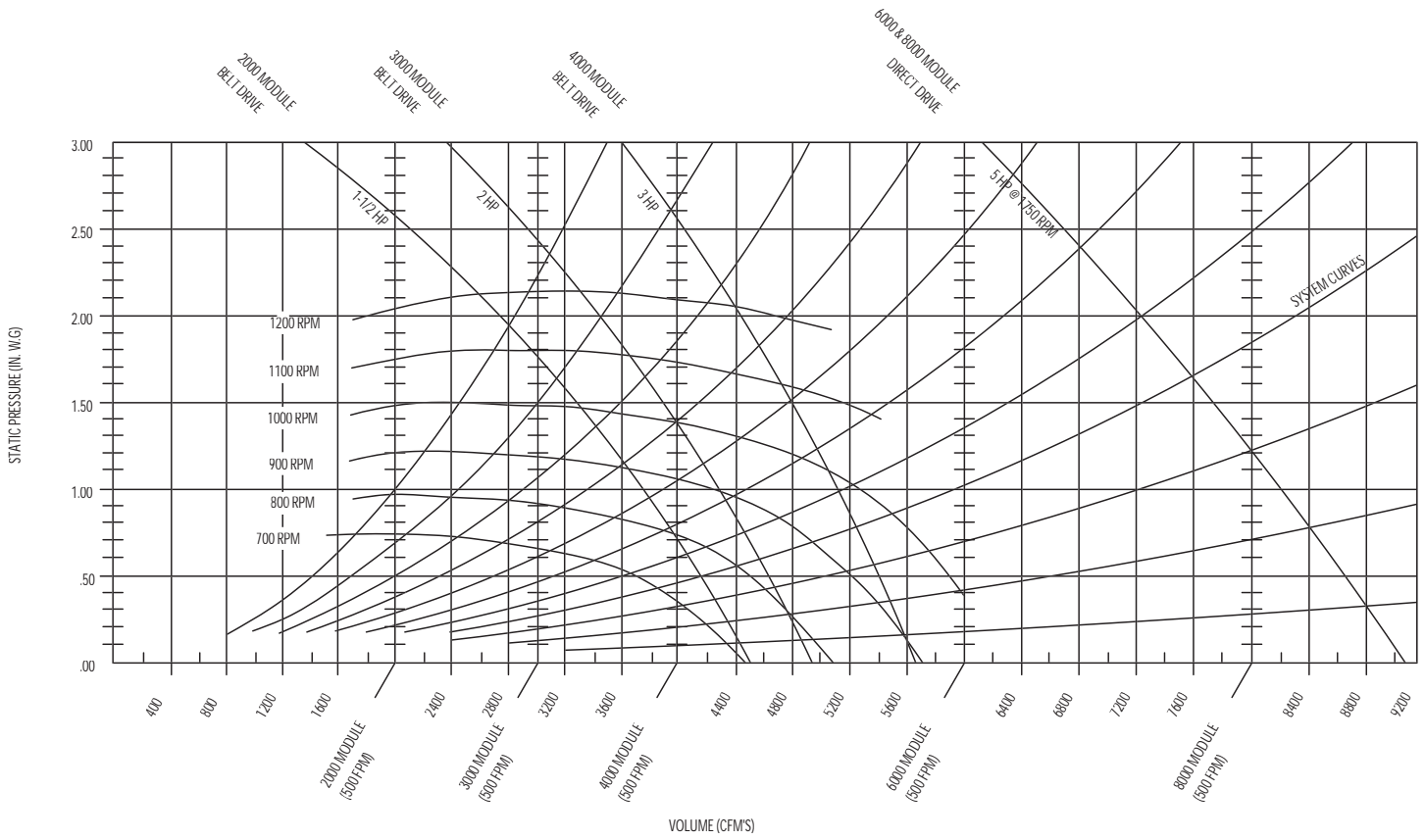


SYSTEM (CFM)	MODULE DESIGNATION	MODULE WIDTH	INSIDE FLANGE WIDTH	MODULE HEIGHT	INSIDE FLANGE HEIGHT	SYSTEM DEPTH	MODULE WEIGHT (LBS)
2000	Shallow Filter	26.00	24.00	29.25	24.25	22.00	110
	Deep Filter	26.00	24.00	29.25	24.25	34.00	132
	Gas/Odor Filter	26.00	24.00	29.25	24.25	38.00	300
	HEPA Filter	28.00	26.00	29.50	24.50	22.25	127
	Blower	28.00	n/a	31.00	n/a	36.39	188
3000	Shallow Filter	37.25	35.25	29.25	24.25	22.00	120
	Deep Filter	37.25	35.25	29.25	24.25	34.00	155
	Gas/Odor Filter	38.00	36.00	29.25	24.25	38.00	421
	HEPA Filter	41.00	39.00	29.50	24.50	22.25	142
	Blower	41.00	n/a	31.00	n/a	36.39	212
4000	Shallow Filter	49.25	47.25	29.25	24.25	22.00	145
	Deep Filter	49.25	47.25	29.25	24.25	34.00	176
	Gas/Odor Filter	50.00	48.00	29.25	24.25	38.00	518
	HEPA Filter	53.00	51.00	29.50	24.50	22.25	185
	Blower	53.00	n/a	31.00	n/a	36.39	233
6000	Shallow Filter	37.25	35.25	53.50	48.50	22.00	150
	Deep Filter	37.25	35.25	53.50	48.50	34.00	194
	Gas/Odor Filter	38.00	36.00	53.50	48.50	38.00	687
	HEPA Filter	41.00	39.00	54.00	49.00	22.25	241
	Blower	41.00	n/a	54.25	n/a	42.39	408
8000	Shallow Filter	49.25	47.25	53.50	48.50	22.00	185
	Deep Filter	49.25	47.25	53.50	48.50	34.00	233
	Gas/Odor Filter	50.00	48.00	53.50	48.50	38.00	889
	HEPA Filter	53.00	51.00	54.00	49.00	22.25	277
	Blower	53.00	n/a	54.25	n/a	42.39	441

1. All dimensions in inches
2. Module height dimensions include 3" rails
3. Module weight determined without filters
4. Gas/Odor Filter weight includes 76-84# carbon/1000 CFM; consult factory for weights including Potassium Permanganate trays.

# System Performance

TO DETERMINE THE SYSTEM PERFORMANCE



## SPECIFICATIONS

<b>Installation Airflow</b>	Suspension or platform mounting Right-to-left (standard). Consult factory for left-to-right.
<b>Pre-Filters</b>	2" aluminum mesh 2" metal mesh 4" 25% pleated 4" 65% pleated
<b>Primary Filters</b>	12" mini-pleat rigid filter with header (65%, 95% or 98%) 18" deep pocket bag filter (65% or 95%) 22" deep pocket bag filter (65% or 95%) 30" deep pocket bag filter (65% or 95%)
<b>Filter Access Filter Tracks Sealant</b>	Latched doors with stainless steel hinges and closed cell neoprene gasketing Extruded aluminum with woven pile steel Silicone compound on metal components
<b>Options</b>	Motor starter (120/60/1, 208-230/60/1, 460/60/3, 575/60/3) Magnehelic gauge kit (field or factory mounted) Inlet plenum (consult factory) Discharge grill (2-way adjustable; available on 6000 & 8000 CFM modules only)

MODEL	2000	3000	4000	6000	8000
Motor (HP)	1.5	2	3	5	5
Volts/Hz/Ph	115/208-230/60/1 208-230/460/60/3	115/208-230/60/1 208-230/460/60/3	115/208-230/60/1 208-230/460/60/3	208-230/60/1 208-230/460/60/3	208-230/460/60/3
Blower	Belt-driven, forward curved	Belt-driven, forward curved	Belt-driven, forward curved	Direct drive, backward inclined airfoil	Direct drive, backward inclined airfoil
Carbon Trays (in)	(8) 24x24x2	(8) 24x24x2 (8) 24x12x2	(16) 24x24x2	(16) 24x24x2 (16) 24x12x2	(32) 24x24x2
99.97% HEPA (in)	24x24x11.5	24x24x11.5 12x24x11.5	(2) 24x24x11.5	(2) 24x24x11.5 (2) 12x24x11.5	(4) 24x24x11.5



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